

Appl. No. 10/516,430
Amtd. dated March 31, 2009
Reply to Office Action mailed October 6, 2008

AMENDMENTS TO THE CLAIMS

The following Listing of Claims replaces all prior Listings and versions of claims in the above-identified application.

Listing of Claims

1. (Previously Presented) A method of identifying a fetal cell in a maternal blood sample, the method comprising:
 - a) obtaining a sample of maternal blood that contains one or more fetal cells; and
 - b) detecting a maternal antibody bound to a paternally inherited fetal antigen on a fetal cell.
2. (Previously Presented) The method of claim 1, wherein the method further comprises exposing the maternal antibody bound to a fetal cell to an agent capable of forming a complex with the maternal antibody.
3. (Previously Presented) The method of claim 2, wherein the agent is detectably labelled.
4. (Previously Presented) The method of claim 3, wherein the label is used to detect the fetal cell-maternal antibody complex.
5. (Original) A method of identifying a fetal cell in a sample, the method comprising exposing cells in the sample to maternal antibodies, and detecting a maternal antibody bound to a fetal cell, wherein the maternal antibodies comprise maternally produced antibodies specific for paternally-inherited fetal antigens.
6. (Previously Presented) The method according to claim 5, wherein the maternal antibodies are prepared by a process comprising dissociation of antibodies from a complex with a soluble HLA antigen and/or an anti-idiotypic antibody.
7. (Previously Presented) The method of claim 5, wherein the method further comprises exposing the maternal antibody bound to a fetal cell to an agent capable of forming a complex with the maternal antibody.
8. (Previously Presented) The method according to claim 7, wherein the agent is an antibody or antibody fragment.

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9. (Previously Presented) The method according to claim 7, wherein the agent is a polypeptide that binds to an immunoglobulin.

10. (Previously Presented) The method of claim 9, wherein the polypeptide is selected from the group consisting of; protein A, protein G, and protein L.

11. (Previously Presented) The method according to claim 7, wherein the agent is detectably labelled.

12. (Previously Presented) The method of claim 11, wherein the label on the agent is used to detect the fetal cell maternal antibody complex.

13. (Previously Presented) The method according to claim 12, wherein the label is selected from the group consisting of: a fluorescent label, a radioactive label, a paramagnetic particle, a chemoluminescent label, an enzymatic label and a label that is detectable by binding to a molecule.

14. (Previously Presented) The method of claim 13, wherein the label is a paramagnetic particle and wherein the step of detecting the fetal cell-maternal antibody complex comprises exposing the cells bound by agent-maternal antibody complexes to a magnet.

15. (Previously Presented) The method according claim 13, wherein the label is a fluorescent label and wherein the step of detecting the fetal cell-maternal antibody complex comprises performing fluorescence activated cell sorting.

16. – 57 (Cancelled)

58. (Currently amended) The method of claim 1, further comprising A method of identifying a fetal cell in a maternal blood sample, the method comprising:

- i) obtaining a sample of maternal blood that contains one or more fetal cells,
- ii) isolating a fraction comprising peripheral blood mononuclear cells from the sample;
- iii) contacting fetal cells from the fraction bound to maternal antibodies with an agent capable of forming a complex with maternal antibodies; and

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- iii) iv) detecting a maternal antibody bound to a paternally inherited fetal antigen on a fetal cell; and
- v) recovering fetal cells bound to agent-maternal antibody complexes.

59–67. (Cancelled)

68. (Previously Presented) The method of claim 58, wherein the agent is an antibody or fragment of an antibody.